

EVIDENCE
FOR THE ORIGINS
OF THE CHAMORRO PEOPLE
OF THE MARIANA ISLANDS

A Paper Presented to
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by
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The Pacific Islands Program, Plan B, requires: "The student's demonstration of research capacity by the submission a major paper prepared for a 600 or 700 numbered research course." (1977-1979 Graduate Information Bulletin, University of Hawaii, Manoa, p.87)

The submission of this paper to Drs. Oliver, Topping and Macnaught represents the fulfillment of that requirement. The paper was researched and written in the spring semester of 1977 for a course in the ESL department (ESL 660, Sociolinguistics).

Since that time I have submitted this manuscript to a number of people to read and comment on. In rewriting this paper in October, 1977, I have made use of their comments and suggestions. Those who have commented on the paper include Dr. Richard Schmidt, to whom the paper was originally submitted, Dr. Donald Topping (SSLI and authority on Chamorro language), Dan Koch (Chamorro language teacher) and Lolita Huxel (Chamorro language teacher). To them go my thanks for advice. Of course all responsibility remains my own.

Robert Graham
October, 1977

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The Setting

The Mariana Islands lie at the northwestern edge of Micronesia, 3,300 miles southwest of Hawaii, 1,200 miles east of the Philippines and 1,000 miles south of Japan. (See maps on two pages following.)

The Marianas consist of fifteen islands in a chain that geologically is a mixture of volcanic peaks rising from the base of the Asian Continental Shelf and coral limestone islands resting on volcanic bases. To the east the continental shelf ends and the ocean plunges to its deepest depth in the Marianas Trench.

The main islands of the Marianas are the southern ones of Guam, Rota, Tinian and Saipan. The total land area of the Marianas is approximately 400 square miles, three-quarters of this total being present in the four southern islands. Guam itself has 215 square miles of land area.

The Marianas in combination with the Caroline, Marshall and Gilbert Islands make up the geographical area known as Micronesia. Politically the Gilberts are distinct as they have been associated with Great Britain and are now moving toward independence while the rest of Micronesia is associated with the United States.

The climate in the Marianas is tropical; rainfall averages 82 inches a year, there are distinct wet and dry seasons and typhoons frequently pass near by.

The Chamorros were the original Oceanic inhabitants of the Marianas. The earliest radio carbon date for settlement is 1527 B.C.⁺ 200 years (Spoehr, 1954, p.66). A recent suggested date of 2,000 to 3,000 B.C. has been given by Jeff Marck based on pottery styles (Marck, 1977, unpublished). At the time of the first European contact in the sixteenth century the Chamorro population was variously estimated to be from 50,000 to 100,000 with the former figure the more likely. (Spoehr, 1954)

The migration route of the original Chamorros is not known and it is this topic which is the concern of this paper.

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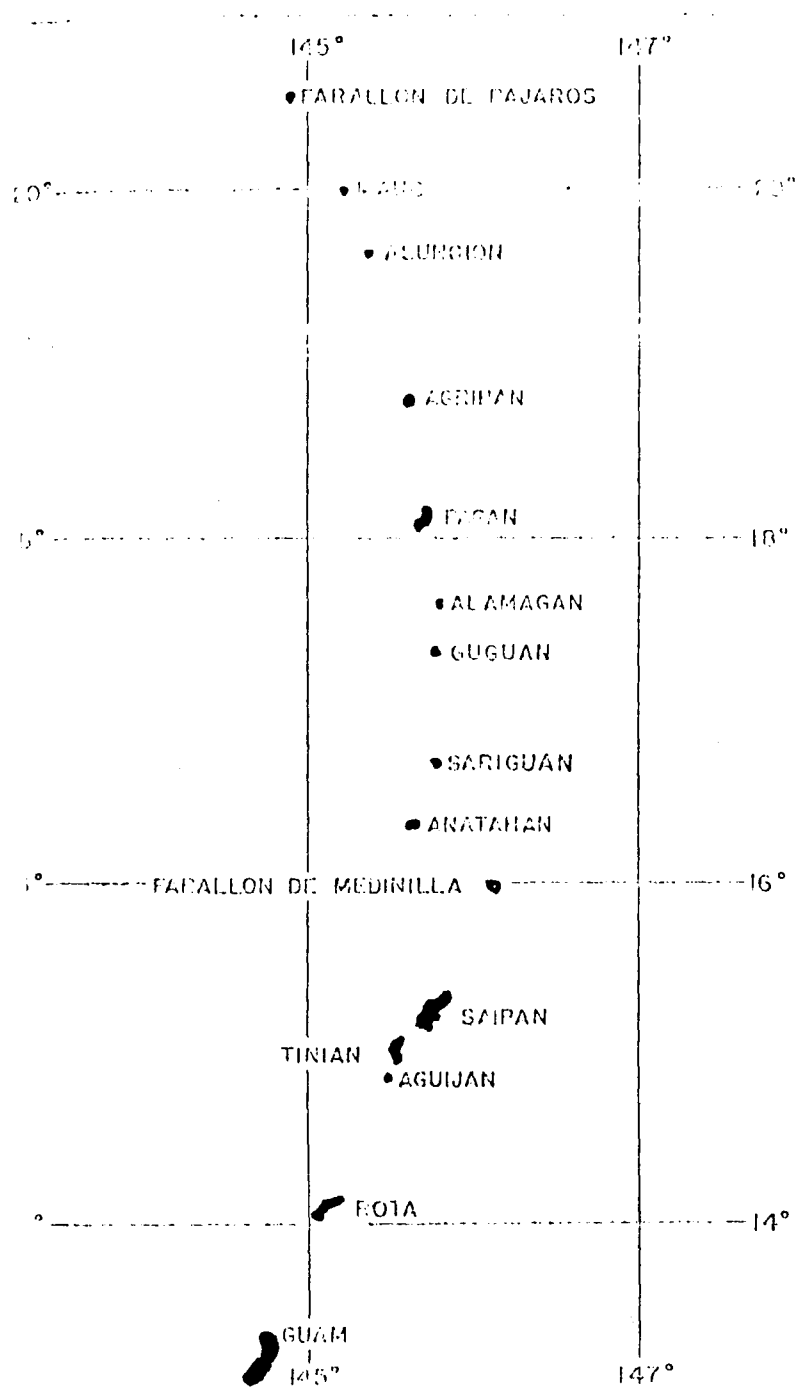


FIG. 1. Map of the Mariana Islands.

Chapter I

The Evidence Through Language Splitting

Chamorro is an Austronesian language.¹ This is one of the largest language families in the world and includes all the languages of Polynesia, Melanesia, the Philippines, Formosan and all Indonesian languages except the Papuan languages which are so diverse that there is no agreement on their grouping.²

Capell (Capell, 1962, p.377) reports that the Austronesian languages are usually divided into Indonesian, Melanesian, Polynesian and Micronesian groups. Yet there is some disagreement if Melanesia and Polynesia should be considered separate branches due to their similarity and the apparent origins of the Polynesian languages within Melanesia. Some linguists also feel that the Micronesian languages are mostly Melanesian with some influence from Polynesia (Voegelin, 1964, p.24).

Chamorro is considered to be an Indonesian language with most linguists recognizing an affinity with Philippine languages (Topping, Koch, Dyen). The Indonesian languages include those of Indonesia, the Philippines, Madagascar and Formosa.

There have been varied interpretations of how the Austronesian languages split into the four main groups mentioned by Capell. The splitting of languages is important in considering the relative sequence in which it occurred and the implications for Chamorro. All the major theorists (Dempwolff, Grace, Haudricourt, Fox and Thalheimer) see the break of the Indonesian languages occurring concurrently with the significant break of the other Oceanic groups (see Capell, 1962; Voegelin, 1964; Matthews, 1950).

¹Austronesian was formerly called Malayo-Polynesian and the latter term is still used by some. Austronesian is preferred as it doesn't single out or exclude any one group.

²New Guinea settlement may go back 30,000 years, the earliest C₁₄ date being 23,000-26,500 B.P. (Fagan, 1977, p.132). Perhaps the longevity of these languages resulted in their diversity or language itself may not have been highly developed when these people first settled.

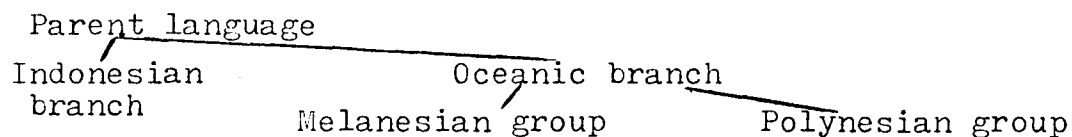
Chamorro according to these theorists is an Indonesian language which did not evolve or split off from Melanesian, Micronesian or Polynesian languages. This seems significant as it indicates that the Chamorros did not travel through Melanesia, Micronesia or Polynesia or at least their language did not evolve from long time residence in those areas if already populated. (Unpopulated areas would leave no linguistic evidence in the unlikely event that the whole population moved on.) If the Chamorros did have origins in areas other than Indonesia it is assumed that their language would be grouped under those of other areas as for example linguists see Marquesan, Hawaiian and Mangarevan evolving from a Proto-Marquesan language which itself split from a Proto-Central Eastern Polynesian, etc. (Green, 1966, p.34)

The C_{14} dating for the Marianas of 1,527 B.C. is similar to early dates for Tonga, Fiji and Samoa where settlement is believed to have been before 1,100 B.C. (Pawley and Green, 1973). It seems doubtful that the Chamorros would have migrated there and then backtracked across the huge expanse of Micronesia to the Marianas without settling at any of the other Micronesian islands which were presumably unpopulated at this time. It is not surprising that we don't find great similarities between Chamorro and Polynesian languages.

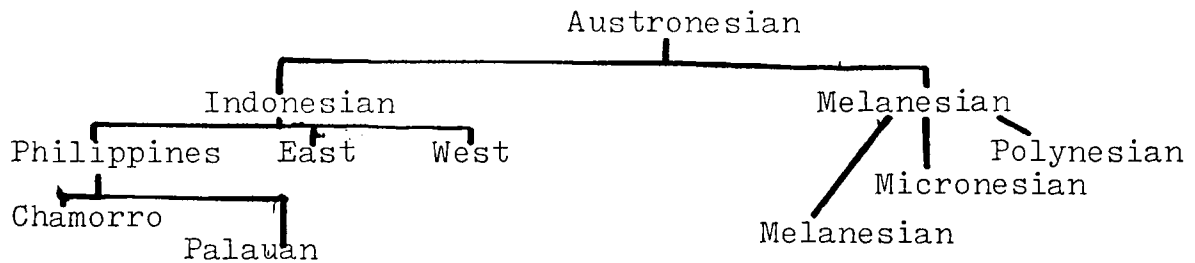
The relations of Chamorro to Melanesian languages seem more plausible given that the off-shore Melanesian islands were long settled and seem to have been dispersal points for settlement of Polynesia and parts of Micronesia. Indeed Dyen's work which will be discussed below notes high cognates of New Guinea languages to Paluan (see page following).

The diagrams below may clarify the theories of language splitting which show the Indonesian branch, which contains Chamorro, as splitting off from the parent stock.

1. Dempwolff (as interpreted by Milner in Capell, 1962, p.376)



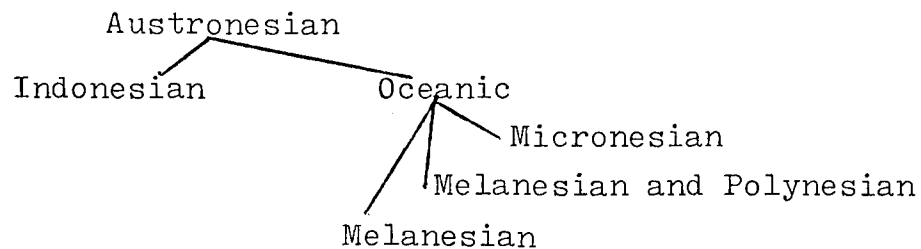
2. Thalheimer (Capell, 1962, p.385)



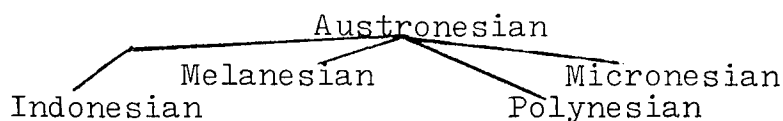
3. Grace (Capell, 1962, p.378)



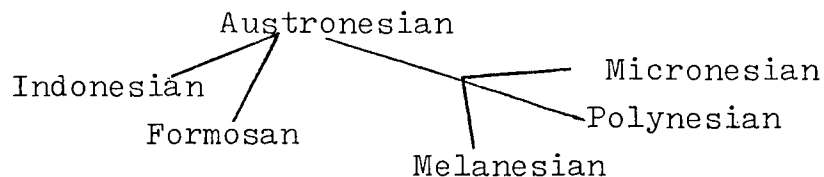
4. Voegelin (Voegelin, 1964, p.21)



5. Fox (Voegelin, 1964, p.21)



6. Haudricourt (Voegelin, 1964, p.21)



From this evidence it would appear that the Chamorro people did not travel a common route with the Polynesians through Melanesia nor were the Mariana Islands later settled from nuclear Micronesia as the Chamorro language does not split from these groups. It appears that Chamorro language derives from Indonesian languages and presumably the Indonesian

area. These seem significant points.

As for the nuclear Micronesian languages(those of Micronesia other than Chamorro and Palau) we must be concerned to note any significant relations of them to Chamorro. After all the Micronesian Islands surround the Marianas to the south and east and form an effective barrier to any settlement from that area or ^{from}Polynesia or perhaps ^{from}Melanesia. In a later chapter we will look more closely at the Chamorro relation to the languages of nuclear Micronesia. For now it is important to note that the major theorists have classified Chamorro as Indonesian rather than Micronesian. The theorists classify the nuclear Micronesian languages as splitting from an Oceanic or Melanesian group at the same time as the Polynesian and Melanesian language groups became differentiated. Capell notes that the whole theoretic^{AI}/situation is drawn into question when the Filipino influence in Melanesian languages is noted. Yet Filipino is given ancestry under Indonesian languages - another branch entirely from Melanesian. Perhaps Capell should refer to common Austronesian heritage rather than Filipino influence.

Dyen's Work

Dyen found that three-quarters of all the Austronesian languages could be classified in a single enormous linguistic family which he called the Malay-Polynesian sub-family. Note that Dyen's use of Malayo-Polynesian is in a more restricted sense than the earlier use which could be used interchangeably with the Austronesian term. Dyen does not include the nuclear Micronesian languages in the Malayo-Polynesian sub-group although he does suspect an affiliation.

Dyen divides the Malayo-Polynesian group into several subgroups: a Heonesian subfamily, Hesperonesian subfamily, Formosan, Moluccan and separate subfamilies each for Chamorro and Palauan. (Murdock, 1964, pp.119-121)

Dyen suspects that the nuclear Micronesian languages might be part of the Heonesian subfamily. Here again a split has been shown between the nuclear Micronesian languages as opposed to separate categories for Palauan and Chamorro each. This again suggests that Palau and Chamorro have separate linguistic

origins from the rest of Micronesia.

Before reviewing some of the evidence that Dyen reports from his search for cognates it is necessary to note some of the criticisms that have been leveled at his work. Donald Topping (Interview, 6/7/77), one of the foremost authorities on the Chamorro language, and others have noted that the large scope of Dyen's work throws into doubt some of his findings. Topping also suggests that Dyen's word list for Chamorro may have been inadequate and that Chamorro has been so changed by Spanish and Filipino word loans that it is perhaps fallacious to use the present day language to attempt to discover origins.

Working with his modified Swaddesh word list Dyen found that Palauan and Chamorro were not particularly close to each other but both were closer to Bareic of the Celebes than to any other Austronesian language. Palau showed 21.1% cognate with Bareic and 18.7% with Tami of northeast New Guinea. Chamorro had 20.4% cognate with Bareic. (Murdock, 1964, pp. 119-120) This suggests a relation of Chamorro to the language of the Celebes and not from the Philippines as others have suggested.* Both the Celebes and Filipino languages can however be grouped with the Indonesian group.

Peculiarly Dyen suggests that the Celebes may have been settled from Guam or Palau rather than vice-versa. He writes that the origin of the Malayo-Polynesians was perhaps in the New Hebrides and New Britain:

. . . under this hypothesis the Malayo-Polynesians appear to have made two independent entries into Indonesia, perhaps at the same time. One of these took them rapidly through Eastern Indonesia as far west as Flores. The other probably from Palau and/or Guam, settled North Celebes, and also Borneo and Southern Mindanao. (Dyen, 1965, p.54)

Dyen's theory, if accepted raises some questions: Where did the people come from who settled Guam and then the Celebes? Could the population on a small island such as Guam or Palau have been the basis for the original settlement of the Celebes? Is Dyen talking about original settlement?

* See note #1 page 29

It is doubtful that the Chamorros settled the Celebes and in fact there is no evidence for such a theory. There is evidence that aspects of Chamorro and Palauan culture such as rice growing, terraces, defensive pits and glass beads derive from the Philippines and thus it seems more likely that settlement was from the continental islands off South East Asia to Palau and the Marianas. Drift voyages from the continental island areas to Palau occur even today showing that ocean and wind currents could allow for settlement in that direction. The evidence, which will be looked at more closely in the following chapter, seems overwhelming in suggesting origins of the Chamorros in the area of the Philippines and Celebes.

Dyen places the Celebes languages in the Hesperonesian subfamily. Murdock sees the Celebes area as an important link between all the language groups. He notes specifically Sangir which has a 39.9% cognate with the Filipino Cebuano, 36.0% with West Indonesian Malay and Sasak, and 33.0% with Moluccan Sikkic. (Murdock, 1964, p.121) He suggests that the Celebes may have been an area for dispersal.

Murdock further interprets Dyen's evidence that the Hesperonesian people traveled from the Celebes to the Philippines and Borneo and then to Madagascar and Southeast Asia. If so then the high rate of Chamorro cognate with the Celebes and not the Philippines would indicate that Chamorro branched off from the former and not the latter. Yet most linguists have recognized similarities between Chamorro and Philippine languages indicating that the language originated in the Philippines. Perhaps the recognized similarities between Chamorro and Philippine dialects might also be present in the Celebes languages. More research needs to be done to clarify this point.

Capell considers the Indonesian languages divisible into three groups of western, eastern and northern. (Capell, 1962, p.379) Under the latter he includes Palauan, Chamorro, Filipino, Formosan, Northern and Western Celebes, as well

as the languages of North Borneo and the islands between the Philippines and Celebes: Sangir, Bantik, Bentenan, etc. He thus reinforces the view of a similarity between Chamorro, Palauan, Filipino languages and those of the Celebes area.

Conclusions

Thus far the evidence indicates a similarity between the languages of the Marianas and the Philippines and the Celebes. Presumably the Chamorros had their origins in the Philippines-Celebes area. But if the original Chamorros left the Philippines-Celebes area did they travel directly to the Marianas or did they settle first in other areas of Micronesia? A following chapter will deal with these possibilities.

Chapter II

Ethnographic Evidence for Early Origins

Historical and ethnographic literature might also indicate early Chamorro beliefs of their origins, indeed an inspection of these documents points again to the Philippines as the probable area of origin.

Father Diego Luis de Sanvitore, the first missionary and martyr of the Mariana Islands in the seventeenth century wrote that oral tradition among the Chamorros noted their origins to the south:

. . . the people of the Marianas say, by tradition passed from father to son and without other history than their memory, that people came from the south to populate these islands, and that they have the same origin as the Tagalog. (Barrett, 1975, p.18)

More recent anthropologists have disregarded San Vitores and written that the Chamorros have no oral tradition of migration theory and that the early people believed that mankind had been born in Guam and as men were scattered over the earth he forgot his native language and thus other languages developed (Joseph and Murray, 1951, p.12). Thus perhaps explaining perhaps the remarks made by Pigafetta on Magellan's voyage recording the first European impressions that . . . "Those Ladroni (Chamorro) thought, according to the signs which they made, that there were no other people in the world but

themselves. " (Pigafetta, 1669-1670, 1969 p.23)

What the real Chamorro beliefs were as regarding their origins remains obscure. Perhaps with contact they had by San Vitores' time noticed the similarities between themselves and the Filipinos and thus referred to their origins to the south. Or perhaps later researchers (Joseph and Murray as well as others) did not make use of San Vitores' early documentation and relied on more current Chamorro beliefs which could certainly have changed as to what their ancestors may have believed.

The early missionaries themselves had been impressed by the similarity of the Chamorro and Filipino languages, customs and forms of government. The Spanish missionaries were familiar with the Philippines because they had earlier missionized in those islands and brought with them lay Filipinos to Guam. The Spanish also sent Filipinos as soldiers to Guam. Because of the noted similarities the missionaries theorized that the Chamorros had migrated from the Philippines. Writing on these similarities San Vitores says: . . . "their argument is supported by the similarity in their tinting of their teeth, and by the similarity in their languages and mode of government." (Barrett, 1975, p.18)

Conclusions

The evidence concerning Chamorro beliefs for their origins is not conclusive. Some have suggested that the early Chamorros believed they originated in the south- perhaps the Philippines. Others have suggested that the Chamorros believed that man himself originated on Guam and later dispersed to other areas from there. There is general agreement among scholars today that the Marianas are closely related to prehistoric Filipino culture. Red pottery was found in both areas, as was rice and related defensive structures of pits lined with sharpened stakes (Spoehr, 1957, p.174).

There are also interesting ties between the cultures of Palau and the Philippines. How this might be related to a theory of Chamorro origins will be the subject of the next

chapter.

Chapter III

Evidence Linking Palau, the Philippines and the Marianas

It is still necessary to review the evidence for relationships of Chamorro to other Micronesian languages and cultures. If significant similarities were found it would indicate that the Marianas were settled thru other parts of Micronesia- if the latter predated the settlement dates for the Marianas. There is some evidence that links Palau to the Philippines and to the Marianas and thus suggests it as a possible dispersal point for Chamorro settlement. We will look at the evidence for Palau as a dispersal point in this chapter and deal with the other Micronesian areas in following chapters.

To the southwest of the Marianas in Palau the presence of glass beads indicates trade from there to Indonesia, the Philippines or Asia (Osborne, 1958, p.170). Although such glass beads don't exist in the Marianas their presence in Palau indicates the feasibility of travel from the Philippines in the direction of Micronesia. In like manner the documented occurrences even today of occasional drift voyages from Indonesia and the Philippines to the Palau area also indicates that ocean currents and wind could allow migration in such a direction. Thus it seems likely that there was contact between the Philippines area and Palau even perhaps regular trade. There is no such direct evidence for contact from the Marianas to the Philippines*although as was noted in the previous chapter the Marianas do seem to be closely related to Filipino culture. Could the Chamorros first have found their way to Palau and then to the Marianas? (See ^{*}Dampier's evidence p.21)

If the Chamorros had originally settled in Palau either purposely or accidentally it would have been relatively easy for them to reach the Marianas from there. At contact there is evidence of voyages between Yap and the Marianas for trade as well as from other areas in the Carolines.(Carano and Sanchez, 1976, p.28-29) Although Palau is not specified as supporting such trade to the Marianas it would not have been significantly more difficult to travel to the Marianas from Palau than

from Yap- given that there are islands between Palau and Yap that could have been used to replenish supplies for the trip and as aids to navigation.

The early European visitors were impressed with the swift canoes and sailing ability of the Chamorros (Blair and Robertson, 1903-1909, XXXIII, p.97) (Pigafetta, 1969, p.23).^{*} Whether or not their 'flying proas', as they were called, would have been adequate for voyages of migration is a difficult question- although partially answered by the evidence that at contact canoes from the Marianas and/or Yap and the Carolines were making such voyages.

Dampier, the English buccaneer, gives a detailed description of the Chamorro canoe: . . . "the bottom was like that of a little canoe and was about twenty-six or twenty-eight feet long. Both sides of the boat were carried up to about five feet high with narrow plank." (Dampier, 1697, pp.298-300) The twenty-six to twenty-eight feet mentioned by Dampier compares favorably to the length of the long-distance sailing canoes mentioned by Gladwin for the Carolines. There the average length of a present-day canoe was twenty-six feet, (Gladwin, 1970 p.26) these canoes capable of making a run from the central Carolines to the Marianas- a distance no shorter than if the early Chamorros island-hopped from Palau to Yap and Ulithi and thence for the longer stretch to the Marianas.

While all this is rather speculative it does indicate the possibility of settlement of people from the Philippines to Palau and thence to the Marianas. I have suggested Palau as a first step because of the evidence linking it to the Philippines (glass beads, terraces) and the persistence of drift voyages from the Philippines. The early contact reports of trade voyages from the Carolines to the Marianas also indicates the feasibility of travel in that direction.

Scholars looking at the possibility of Palau as a dispersal point have noted similarities between Palauan and Chamorro culture as well as the geographical location of Palau and have concluded that Palau may have been the path through

^{*} Blair and Robertson as cited by Lessa, 1975, p.117

which man entered western Micronesia.

Alexander Spoehr writes that Palau lies in the direct path of presumed Malaysian migrations and that it was probably the funnel by which man entered the Carolines and Marianas (Spoehr, 1957, p.18). Evidence now indicates that Yap in the western Carolines was settled through nuclear Micronesia and not as Spoehr suggests through Palau.

Directly south of Palau is western New Guinea. A string of islands: Tobi, Merii, Pulo Anna and Sonsorol, lie between New Guinea, the Celebes and Palau making contact by short voyages possible. David Lewis indicates that raids from West Irian to these southern Palauan Islands may have occurred at one time (Lewis, 1972, p.33). Additionally New Guinea dialects also show their highest cognates with Palauan. These include Kairiru of northeast New Guinea which has 17.0% cognate with Palauan and Dank of New Hanover which shows 17.4% cognate with Palauan (Dyen, 1965). Thus there is evidence that links Palau with New Guinea as well as the cultural similarities noted between it and the Filipino cultures. There is no satisfactory dating to indicate when Palau may have been settled and we will have to await further archaeological and linguistic research to indicate possible connections of Palau to other areas.

Osborne also notes Palau's strategic location as a place well located to receive early and continued influence and migrants from Indonesia and Melanesia. He sees Chamorro and Palauan cultural and linguistic similarities of pottery and megalithic remains (Osborne, 1958, pp.133-164). Osborne writes that ancient Palauan culture was rooted in the Filipino Iron Age or as part of the broader aspect of Indonesian culture (Osborne, 1958, p.171).

Donald Topping notes that linguistically Chamorro and Palauan differ as well as they agree. Topping (Topping, interview, 1977) notes some similarities but suggests that the two languages have at least been separated for a long time.

Izui writes that Chamorro and Palauan originated from different stages of Indonesian development or from very early Indonesian dialects and that thereafter both developed their own complicated grammatical structure independently of each other (Izui, 1965, p.355).

Dyen's evidence showed that Palauan and Chamorro had 18.9% cognate with each other, which is described as 'not particularly high' and Palauan cognate with Trukese was only slightly lower at 18.3%. While 18.9% of cognate may not be high we must consider the distortion of the Chamorro language by Filipino and Spanish loan words (estimated to be as high as 40% of the Chamorro vocabulary) which might make a higher cognate unlikely even if such languages were once more closely related (Bowen, 1971, p.949).

Matthews (Matthews, 1950, p.436) notes similarities between Chamorro and Palauan but concludes that they probably constitute two separate branches. Yet Matthews evidence is faulty as he writes that Palauan has a definite and ligative article while Chamorro does not. In fact, however, Chamorro does have the ligative article. Bender points out that Matthews also failed to note the critical feature of Chamorro infixation (Bender, 1971, p.431). Matthews had concluded that parallels to Chamorro must be sought separately in Indonesia while those for Palauan should be sought in the more involved Filipino varieties. But the basis for his conclusion was faulty and Palauan and Chamorro may be more closely related than Matthews allows for.

Conclusions

It might be expected from archaeological evidence that Palau and the Marianas had similar migration routes through Palau yet the linguistic evidence neither proves or contradicts this. It seems possible on geographical evidence that the Chamorros did travel through the Palaus, but it is not clear if the Palauans were already settled there or if the Chamorros moved on to the Marianas relatively quickly. In any case both Palauan and Chamorro are differentiated from nuclear Micronesian languages and both show similarities to Filipino languages and culture as well as Palauan relations to New Guinea^a languages.

Linguistically the similarities between Palauan and Chamorro are not conclusive yet there are enough to keep alive the possibility that the Marianas were settled through Palau or at least that both had similar origins.

Chapter IV

Clues in Yap for the Migration of the Chamorros

If the Chamorros passed through Palau on their way to settlement in the Marianas might they have stopped in Yap and remained long enough for cultural and linguistic evidence to be present?

The Yap Islands are located northeast of Palau and are on the possible migration route from there to the Marianas. Yap itself is also a big island and fertile enough to attract settlers. The other islands between Palau and Guam are smaller, less fertile atolls: Ngulu, Ulithi and Fais and they would be less attractive to permanent settlers from Palau.

Gifford worked briefly on Yap and obtained a C_{14} date of 176 A.D. (Marck, unpublished, 1977). This is much more recent than the earliest C_{14} date for the Marianas of 1527 B.C. If Gifford's date is accepted as an indication of the earliest settlement in Yap it indicates that if the Chamorros passed through Yap they left little remains and thus probably stayed only a short while and that the islands were otherwise uninhabited by a permanent population.

Linguists see Yapese as a nuclear Micronesian language and as such differentiated from the languages of the Marianas and Palau. Yap was probably settled from the nuclear Micronesian area.

Matthews (Matthews, 1950, p.423) finds Yapese highest cognate with Ponape which would correspond nicely with the theory of settlement from nuclear Micronesia. Dyen, however, finds Yapese highest cognate with Kerebutu, Southern Solomons in the Heonesian Linkage (Bender, 1971, p.435). Dyen believes that the other nuclear Micronesian languages also affiliate with the Heonesian Linkage.

Voegelin suspects that Yapese is a divergent member of nuclear Micronesian languages which is separated by tremendous distance.

Cultural similarities between Yap and Palau (i.e. pottery) could be a result of the trading known to have existed between these islands. Yapese language also shows borrowing from Palauan and Ulithian (Bender, 1971). Thus there is evidence for pre-European contact between Yap and Palau although the significance of this for origins of the Chamorros is less clear given the lack of linguistic ties between Chamorros and Yapese and the lack of a ^{satisfactory} chronological dating pattern.

The possibility remains that the Chamorros might have passed through Yap before the settlement of the main Yapese population or the Chamorros might have remained only a short time. This would explain the lack of linguistic evidence of contact between the Yapese and Chamorro languages.

If the Chamorros had left Palau for the general direction of the Marianas it seems unlikely that they would have passed by a fertile empty land such as Yap for the alternative of further ocean voyages. Yet under certain circumstance it is possible. Perhaps the Chamorros wished to put greater distance between themselves and Palau which is relatively near to Yap. If the Chamorro emigrant population was leaving Palau because of loss in war they might have feared further attack if they settled in Yap. Although we know nothing of the reasons for the early migrations there is evidence in the Pacific of islands controlling far off communities and perhaps the same thing might have been feared between Yap and Palau. (Yap itself until recently controlled the far flung islands of the Yap Empire and Tonga is known to have conquered and controlled areas on Fiji.)

In contrast to Yap the Marianas would have been far enough away to insure relative security from Palau and the higher, larger and more fertile islands of the Marianas would have been most attractive to the people leaving Palau where Babelthuap is itself a large, fertile island. (All these islands being much bigger than Yap.

It is possible that native Pacific explorers or people cast adrift had reached the Marianas and returned to the Palaus with stories of those high, fertile islands. Such voyages are possible given the occasional fluctuation of the winds, distances involved and the trade noted at the time of contact.

Conclusions.

Most of the evidence dealing with Yap as an area of settlement for the original Chamorros is hypothetical yet it is interesting to speculate on what may have drawn people to the Marianas. In previous chapters we have noted the similarities of Chamorro culture and language to those of the Philippines. We have also looked at the ties of Palau to the Philippines and the indications that the Chamorros might have passed through Palau on their way to the Marianas. We have now suggested the possibility of a similar migration through Yap. While all this makes interesting speculation it remains for the most part unproven. Perhaps with more archaeological, linguistic and cultural research it will some day be possible to reconstruct the migration routes of the people of this part of the world. Now we will turn our attention to the area of nuclear Micronesia and any evidence that relates those languages to that of the Chamorros.

Chapter V

Evidence for Origins of Nuclear Micronesians and Connections to Chamorros

Thus far the evidence for Chamorro contacts with the Philippines, Celebes, Palau and Yap has been noted. While the evidence from this area has not been conclusive we have noted the cultural and linguistic similarities of the area.

The nuclear Micronesia area also shows similarities among itself but not with Palau and the Marianas. All major theorists have separated the Chamorro and Palauan languages from the those of nuclear Micronesia: Trukic, Ponapeic, Kosraen, Marshallese and Gilbertese, being the major language groups there. These theorists, including Dempwolff, Thalheimer, Grace,

Voegelin, Fox and Haudricourt, label Chamorro as an Indonesian language while the nuclear Micronesian languages were included in a separate group, thus indicating separate origins.

There is no accepted version of the origins for the nuclear Micronesians nor how their migrations might be related to those of the Chamorros. If our object is to study the possibility of Chamorro origins from nuclear Micronesia, which it is, then the evidence is fairly clear that there was no such relationship. Chamorro does not derive from nuclear Micronesian languages as they show no significant cognates or grammatical similarities nor has anyone made a case for the culture of the Marianas evolving from those of nuclear Micronesia.

Nuclear Micronesia was settled separately from the Marianas and Palau. Yet as these areas are geographically close it seems advisable to discuss the theories concerning nuclear Micronesian origins in order to indicate that both nuclear Micronesia and the Marianas may have been settled separately.

Nuclear Micronesia Settlement

Jeff Marck , who is presently doing original work with the nuclear Micronesian languages, notes that Gilbertese is the most divergent of these languages indicating the possibility of the earliest settlement of nuclear Micronesia there. Geographically the Gilberts would be well located, although at a long distance, to receive migrations from Melanesia as the Equatorial Counter Current passes through the northern Gilberts.

Migration from Polynesia to the Gilberts would also seem possible as the Gilberts are located near the island areas of Fiji, Tonga and Samoa- all known to have been important staging areas for Polynesian migrations into the Pacific. As Micronesian languages do not evolve from those of Polynesia it is doubtful that settlement was from this direction.

It is more likely that the early Micronesians diverged from off-shore areas of New Guinea, the Bismarck Archipelago and the Solomons as did the Polynesians. Genetic drift could account for the difference in physical characteristics between the Polynesians, Micronesians and Melanesians.

While the New Hebrides seem rather far south to have been the origin of the Micronesian settlers George Grace does postulate that the nuclear Micronesian languages originated there. He (Grace, 1963, p.367) suggests that Proto-Austronesian was spoken at or near Southeast Asia with the development of Proto Eastern Austronesian occurring near the north coast of New Guinea. This language broke up and the eastern Austronesian languages spread to Papua, Solomon Islands and the New Hebrides. Eventually the language moved from the New Hebrides into Micronesia spreading to most areas there. Meanwhile the Austronesian language of the Marianas and Palau had entered from Malaysia. Grace does not postulate times for these dispersals although he does suggest that the Polynesian languages also branched off from New Hebrides to Fiji and then Rotuma and western Polynesia.

When the original nuclear Micronesian settlers reached the Micronesian islands where did they settle? Marck suggests the Gilberts as the original area of settlement while others have noted the importance of Kosrae (Kusaie) and Ponape. Bender (Bender, 1971, p.457) and Clune (Clune, 1974, p.205) write that linguistic evidence suggests that nuclear Micronesia was settled from Ponape.

The evidence does seem fairly strong in suggesting Ponape as an area of dispersal. From Truk far west to Tobi the languages are closely related and all share high cognates with Ponapean (Bender, 1971, p.439). Marshallese, Kosraean and Gilbertese also all share their highest cognate percentages with Ponapean (. Ibid.). Dyen suggests a movement from Kosrae to Ponape and from there east to the Marshalls and Gilberts and west into the Carolines (Dyen, 1965, p.55). Clune (Clune, 1974, p.205) also notes the Trukese myths of settlement from Kosrae.

Most scholars thus see Ponape as an area of dispersal to east and west Micronesia with earlier settlement perhaps in Kosrae. These nuclear Micronesians would have reached Kosrae and Ponape from islands in the eastern Melanesia area as opposed to Palauans and Chamorros who originated in western Melanesia and/or the Philippines area. The settlement of

the Marianas and Palau would have occurred earlier (as C₁₄ dates indicates) with nuclear Micronesia being settled later. Until more archaeological work is done in nuclear Micronesia it is impossible to suggest time depths for settlement there.*

Geographically Kosrae and Ponape are the most attractive islands for early settlement in nuclear Micronesia. It seems plausible that the original settlers would have chosen these islands which are both the highest (thus visible from longer distances) and the most fertile of nuclear Micronesia. At later times the migrants might have branched out to the smaller islands and atolls of east and west Micronesia. Kosrae, too, is located just north of the Equatorial Counter Current and thus might have received voyagers from Melanesia.

The only contradictory evidence for Ponape and Kosrae as original points of dispersal is the sharply divergent Gilbertese language that Marck notes. Perhaps the status of the Gilberts will have to await clearer linguistic and archaeological research. One possibility is that the Gilberts after settlement from Ponape may have become more isolated than the other nuclear Micronesian area where trade is known to have existed. In such circumstances the Gilbertese language could have become the most divergent through isolation and self-development.

Researchers must also note the megalithic remains in Ponape, comparisons of which could be made to similar stone work in Melanesia and Polynesia. Perhaps as the Micronesian culture spread the knowledge of these great stone works was lost. Certainly accessibility to basaltic rock in nuclear Micronesia is limited to the high islands of Ponape, Kosrae and Truk lagoon. Although note must also be taken of the walls of coral stone used for fortifications during the ancient wars of the Marshallese.

* Marck suggests the settlement of Micronesia might have occurred conjointly with the settlement of Fiji and New Caledonia. The earliest date for Oceanic tradition in New Caledonia goes back to 3000 B.C (Pawley and Green, 1973). There is need for some direct proof that settlement of nuclear Micronesia would go back so far.

The recent discovery of pottery in Truk will also have to be researched to see how it relates to the ubiquitous Lapita pottery of Melanesia and Polynesia and the separate pottery types of Palau and the Marianas. Further research in these areas may give added insight into the origins of the people.

Marianas Settlement from Nuclear Micronesia?

Only Solenberger suggests that the Marianas might have been settled from the nuclear Micronesia area. He suggests an original population of Carolinians were later dominated by the Chamorros thus offering an explanation for the two caste system known to have existed at the time of contact.*

Solenberger's evidence (Solenberger, 1968) is the pre-contact Carolinian voyages between the Marianas and the Carolines and his suggestion of the Carolinian etymology of place names in the Marianas. By themselves the trade voyages are not evidence for original settlement. The two class system could also have developed internally without a second wave of immigrants. Thompson (Thompson, 1947) also suggests a two wave theory of migration. Her evidence is the physical differences between the two classes but as we believe that these two classes were prohibited from intermarriage, (Carano & distinct physical types could have developed over a number (Sanchez, 1976, p.20) of centuries.

Spoehr (Spoehr, 1957, p.170) also notes that archaeological work indicates that in the ninth century A.D. the people of the Marianas began to build their homes using the distinctive latte platforms but he notes that this could have come about from internal development as well as from outside influence. At the same time there was a switch from the Marianas Red pottery to Marianas Plain but this too could have been an internal development or the result of trade known to have existed between the Marianas and the Carolines.

There is some interesting evidence of change in the Marianas' physical culture (latte stones and pottery change) in the ninth century A.D. The evidence for a class system also suggests the

*See note #2 page 29

possibility of more than one wave of immigrants- yet none of the evidence is conclusive and all developments of the Marianas culture can be explained by the changes that normally occur in any society. Solenberger does not support his argument with evidence from Thompson or Spoehr. He relies mainly on the suggestion that place names in the Marianas are of Carolinian origin.

Peculiarly enough Solenberger gives no examples to support his theory of Carolinian origins of Chamorro place names. Turning to other sources David Lewis (Lewis, 1972,p. 35) does note that the Carolinian name for Saipan, 'Sepi Puun,' or 'Empty Place' probably refers to the island when the Spanish removed all its inhabitants (Lewis notes personal communication from Lykke, 1969). If Saipan does derive from 'Sepi Punn' it is probably because Saipan was resettled by Carolinians in the 19th century after typhoons had destroyed their own homes in the Carolines. The island was indeed an 'empty place' as the original Chamorro residents had been resettled on Guam by the Spanish in the late 17th century and they did not return to Saipan until after the resettlement of that island by the Carolinians.

In fact there are examples of Chamorro etymologies of the place names of the Marianas. One that I am aware of notes the similarity between the name 'Guam' and the Chamorro word 'guaha' which means 'to have.' It has been suggested that the ancient people noted the abundance of Guam and thus noted that it was a place where it was possible 'to have'. In like manner Monsignor Calvo (Calvo, personal communication, 1976) suggests the word 'Chamorro' might have evolved from the words 'cha' 'mauleg' and expressed the natives offering of food to the early explorers.

In any case evidence for Solenberger's theory of Carolinian origins for the Chamorros appears to be sadly lacking. The Chamorros did not originate in nuclear Micronesia of that we can be quite sure.

Conclusions

Linguistic evidence indicates separate grouping of the languages of nuclear Micronesia from those of Palau and the Marianas. The languages of nuclear Micronesia are most closely related to Ponapean and it appears that east and west Micronesia may have been settled from there. Kosrae to the south of Ponape was perhaps settled before Ponape itself. As the nuclear Micronesian languages do not diverge from those of Polynesia it is unlikely that Micronesia was settled from that direction. More likely nuclear Micronesia was settled from eastern Melanesia as was Polynesia. There is no evidence that the Marianas were settled from nuclear Micronesia although there was contact between those areas. Thus we have successfully accounted for different origins for the nuclear Micronesian people and those of Palau and the Marianas.

Chapter VI

Summary of the Alternatives

Directly from the Philippines?

Thus far our research has centered mainly on the suggestion that the Marianas were settled through Palau or nuclear Micronesia. But could the Chamorros have sailed directly from the Philippines? The evidence below indicates the possibility of this alternative.

Dampier, visiting Guam in 1686, writes of direct contact from the Marianas to the Philippines by native Chamorro proa. "I was told that one of these Boats was sent Express to Manila, which is above 400 Leagues, and performed the voyage in Four Days time." (Dampier, 1729, p.207) If this is true and there is no reason to suspect that it isn't, it indicates that the wind, currents, navigational knowledge and canoe construction would allow the feasibility of such voyages.

Of course Dampier reached the Marianas more than 150 years after first contact and the settlement in the Marianas of some Filipinos. It is possible that these voyages were not present at pre-contact or were the result of ^{later} Filipino influence.

Other evidence for such direct contact is linguistic and cultural similarities (already discussed) that link the Marianas and the Philippines. Yet another intriguing link is the presence of rice in the Marianas and its presumed origins in the Philippines. Rice is found nowhere else in Micronesia. As it is not found in the Palaus it ^{seems} unlikely that the Marianas could have gained it from anywhere but through direct contact with the Philippines. Yet this is not entirely the case as terraces found in Palau may have been used to grow rice. It is also possible that rice was introduced into the Marianas after their initial settlement but before European contact. Rice could first have arrived in Palau or Yap through trade or drift voyages from the Philippines and then through trade from the Caroline Islands have found its way to the Marianas. In such a case perhaps it was never successfully planted in the Carolines or we have simply not ^{yet} found the evidence for it.

Rice is known to have existed in the Marianas at the time of Dampier's voyage in 1686. He writes: "They have here some rice also: but the island being of a dry Soil, and therefore not very proper for it, they do not sow very much." (Dampier, 1729, p.205.) Monsignor Calvo (Calvo, interview, 4/1/76) also notes the remains of stones once used for pounding rice and the presence of primitive pre-contact rice grains found in a cave site on Rota. (Found by a Japanese archaeologist, unpublished and unconfirmed by me.)

Thompson (Thompson, 1947, p.24) also suggests the presence of rice pre-contact and Spoehr (Spoehr, 1954, p.35) writes: "The evidence for rice-growing comes principally from the accounts of early travellers, who mention it so frequently that their identification was probably correct."

The earliest reports by Pigafetta, Magellan's chronicler, don't mention rice so that it remains unsure that rice existed pre-contact. It may instead have been an early introduction of the Spanish.

Conclusions

The Marianas may have been settled directly from the

Philippines. The linguistic evidence certainly indicates a close tie to the languages of that area. There is also the suggested presence of pre-contact rice in the Marianas which would have come from the Philippines. Additionally there are other cultural similarities between the Marianas and the Philippines including pottery and defensive pits. Dampier also indicates the possibility of direct contact by native canoe.

Summary of Findings

It remains possible that the Marianas were settled by direct contact from the Philippines. The other theory that was given close scrutiny was the suggestion that the Chamorros may have passed through or settled Palau and/or Yap before reaching the Marianas. Palau is geographically well located to receive immigrants and there are also cultural similarities linking it to the Marianas and to the Philippines. However there is no linguistic evidence that indicates that Chamorro derives from Palauan nor is there a linguistic connection to Yapese. If the Chamorros passed through these islands they left little evidence or perhaps migrated before a permanent settlement was established.

Evidence for settlement through Palau includes the occurrence of trade from the western Carolines to the Philippines for glass beads and trade to the Marianas for stone. There is additional evidence for drift and return voyages in this area. (Lewis, (Lewis, 1975, p.34) notes the occurrence of drift voyages from Palau and Yap to the Philippines and return. He does not explain the basis for this information or the time span in which they occurred. His direction of drift voyages is in the opposite direction of those current ones that I am familiar with- they usually occurring from the Philippines, Indonesia or New Guinea to Palau.)

The third major possibility that was discussed was the suggestion that the Marianas may have been settled from nuclear Micronesia. The evidence is quite convincing that this was

not the case. In fact the nuclear Micronesians had separate origins from those of the people of the Marianas and Palau.

This paper has suggested alternative theories for settlement of the Marianas. I have tried to approach all possibilities with an open mind and base conclusions and suggestions on the weight of the evidence. Until more work is done in archaeology, linguistics and cultural research it will be impossible to ascertain with any certainty the origins of the Chamorros , or any Micronesian people. For now we must be satisfied with the review of the possibilities as they have been presented. Future work will also have to deal with the possibility, suggested by others, linking the Marianas to Japan and Formosa- an area of research that I am unfamiliar with and thus have not included here.

We are left with two possibilities- a settlement of the Marianas directly from the Philippines or indirectly through Palau. The readers might want to make their own conclusions. Personally I don't find either possibility convincing enough to be considered proven. Yet I am satisfied in covering this topic in more depth than anywhere else.

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NOTES

#1 (Refers to page 5) Dyen actually says:

The lexicostatistically defined position of Chamorro as a member of the Malayopolynesian Linkage is very likely to need revision. Chamorro shares so many features with the Hesperonesian Languages and particularly with those of the Philippines as to suggest that Chamorro's percentages for some reason are distorted. It is not unlikely that the heavy borrowing from Spanish has deflated its percentage at least with the Hesperonesian languages and perhaps more particularly with Philippine languages. On the other hand no reason has developed to suspect the percentages of Palau, also often regarded as a Philippine language. (Dyen, 1965, p.51)

Dave Tuggle (Tuggle, personal communication, 1977) suggests that current archaeological research indicates the areas of southern Philippines and the Celebes as possible areas of dispersal for the original settlers of Polynesia- the Lapita potters. Perhaps it is not necessary to attempt to differentiate between the areas rather to say that there are indications of cultural and linguistic similarities in both areas. Settlement might have come from one or both to the Marianas.

#2 (refers to page 19)

Carano and Sanchez (Carano and Sanchez, 1976 pp.20-21) suggest a three or four class system. Spoehr is probably most honest when he writes that the exact nature of the class system is unknown (Spoehr, 1957, p.25).